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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,195	11/26/2003	JAMES YANG	12251-US-PA	1194

31561 7590 08/23/2007  
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE  
7 FLOOR-1, NO. 100  
ROOSEVELT ROAD, SECTION 2  
TAIPEI, 100  
TAIWAN

EXAMINER
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ALIA, CURTIS A

ART UNIT	PAPER NUMBER
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2609

NOTIFICATION DATE	DELIVERY MODE
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08/23/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USA@JCIPGROUP.COM.TW

## Office Action Summary

**Application No.**

10/707,195

**Applicant(s)**

YANG, JAMES

**Examiner**

Curtis Alia

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-10 and 13-18 is/are rejected.
- 7) ☒ Claim(s) 3,4,11 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on: 26 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. It is suggested to remove the brackets surrounding the title.

### *Drawings*

2. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Objections*

3. Claim 2 is objected to because of the following informalities: lines 11-13 state "and all of the IP phone with the built-in gateway server a function of telephone conference." It is suggested to change the phrase to --- and all of the IP phones with the built-in gateways serve a function of telephone conferencing ---. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chou (US 2003/0169860) in view of Sharma et al. (US 2002/0075815).

For claim 1, Chou discloses an IP phone comprising a built-in network gateway having an IP terminal, a plain old telephone service terminal and a local telephone terminal (see paragraph 17, lines 8-19).

Chou teaches all of the limitations of claim 1 with the exception that a signal entering any one of the three terminals is permitted to convert and transmit to the other two terminals simultaneously. Sharma from the same field of endeavor teaches the function of establishing a data over voice communication session, which allows simultaneous transmission of full-duplex data and voice (see paragraph 109, lines 1-5), as well as digitizing (see paragraph 110) and undigitizing (see paragraph 114) of voice data. Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to allow for conversion and simultaneous transmission of voice and data as taught by Sharma in the IP phone system of Chou. The simultaneous transmission of voice and data can be implemented into the system of Chou by adding hardware and software functionality to the port controller/gateway of the IP phone. The motivation for using the simultaneous conversion and transmission of voice and data

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as taught by Sharma in the IP phone system of Chou is that a user is able to transmit data to a remote location while concurrently talking to the person receiving the data over the same sets of equipment (see paragraph 89).

7. Claims 2, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chou and Sharma in view of Lukin (US 6,973,169).

For claims 2, 8, and 9, Chou discloses an IP phone comprising a built-in network gateway having an IP terminal, a plain old telephone service terminal and a local telephone terminal (see paragraph 17, lines 8-19), the IP phone with a built-in gateway processes voice signals (see column 3, lines 34-39), and the IP phone with built-in gateway processes voice and video signals (see column 3, lines 34-48).

Chou and Sharma teach all of the limitations of claim 2 with the exception that the IP phones are connected together in series by the IP terminal and the POTS terminal to form a telephone network and all of the IP phone with the built-in gateway server a function of telephone conference. However, Lukin from the same field of endeavor teaches the provision of connecting different elements, such as a computer and a telephone, in series through the network adapter and telephone adapter to enable converted signals to be transmitted between the ports/terminals (see column 3, line 60 through column 4, line 7). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to connect two network/telephone devices serially to achieve network connectivity between the devices so that they may share the same data channels. The serial connectivity of Lukin can be implemented into the system of Chou and Sharma by connecting two network devices (IP phones) at the network ports (RJ-45) to achieve a serial connection between the two devices. The motivation to

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combine the serial connection as taught by Lukin into the system of Chou and Sharma is that there would be no need for a separate switching device at the central office when making calls between these devices.

Chou, Sharma, and Lukin teach all of the limitations of claim 2 with the exception that a connection between multiple IP phones in one or more networks can be made to establish a telephone conference. However, this is a well-known feature of telephones in general, and is also well known in IP phones (see reference Fandrianto et al., US 7,006,455). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to include telephone conferencing capabilities to an IP phone network. A conferencing module can be added to each phone to mix incoming voice signals and can multicast a voice signal to each connected phone in the conference. The motivation to combine these features is that multiple packet-switched devices can connect together just as multiple regular telephones can connect together in a conference.

8. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over (Chou and Sharma) in view of Lukin (US 6,973,169) and further in view of Chang et al. (US 2003/0091028).

For claims 5-7, Chou, Sharma, and Lukin teach all of the limitations with the exception that both the front and the end terminals of the telephone network structure operate in IP mode, both the front and the end terminal of the telephone network structure operate in a POTS mode, and the front and the end terminal of the telephone network structure operates in a POTS mode and an IP mode respectively. Chang, from the same field of endeavor, teaches the limitation that the system routes a voice telephone call from a first location to a second location using the IP

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network, then can route a voice telephone call from a second location to a third location using the PST network (see paragraph 16). Chang's invention also decides the best routes to use (whether IP network or PST network) to avoid congestion, so it may use IP network in either front or back end, and it may use PST network in either front or back end. Thus it would have been obvious to a person having ordinary skill in the art at the time of the invention to combine the adaptive routing of voice calls through both types of networks into the IP telephone system. This adaptive routing can be implemented into the IP telephone system by adding a gateway capable of routing to and from both IP and PST/POTS (digital and analog) networks. The motivation to combine these teachings is that it provides an alternate route for calls that degrade in quality past a predetermined threshold.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chou and Sharma in view of Lukin.

For claim 10, Chou discloses a telephone network system comprising at least an internet-protocol phone, wherein at least one of the IP phones has a built-in gateway providing an IP terminal, a plain old telephone service terminal, and a local telephone terminal (see paragraph 17, lines 8-19).

For claim 10, Chou teaches all of the limitations with the exception that a signal entering any one of the three terminals is permitted to convert and transmit to the remaining terminals simultaneously. Sharma from the same field of endeavor teaches the function of establishing a data over voice communication session, which allows simultaneous transmission of full-duplex data and voice (see paragraph 109, lines 1-5), as well as digitizing (see paragraph 110) and undigitizing (see paragraph 114) of voice data. Thus, it would have been obvious to a person

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having ordinary skill in the art at the time of the invention to allow for conversion and simultaneous transmission of voice and data as taught by Sharma in the IP phone system of Chou. The simultaneous transmission of voice and data can be implemented into the system of Chou by adding hardware and software functionality to the port controller/gateway of the IP phone. The motivation for using the simultaneous conversion and transmission of voice and data as taught by Sharma in the IP phone system of Chou is that a user is able to transmit data to a remote location while concurrently talking to the person receiving the data over the same sets of equipment (see paragraph 89).

For claim 10, Chou and Sharma teach all of the limitations with the exception that the IP terminals or the POTS terminals of two neighboring IP phones are serially connected together in the same mode to form a telephone network. However, Lukin from the same field of endeavor teaches the provision of connecting different elements, such as a computer and a telephone, in series through the network adapter and telephone adapter to enable converted signals to be transmitted between the ports/terminals (see column 3, line 60 through column 4, line 7). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to connect two network/telephone devices serially to achieve network connectivity between the devices so that they may share the same data channels. The serial connectivity of Lukin can be implemented into the system of Chou and Sharma by connecting two network devices (IP phones) at the network ports (RJ-45) to achieve a serial connection between the two devices. The motivation to combine the serial connection as taught by Lukin into the system of Chou and Sharma is that there would be no need for a separate switching device at the central office when making calls between these devices.



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10. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over (Chou and Sharma) in view of Lukin (US 6,973,169) and further in view of Chang et al. (US 2003/0091028).

For claims 13-15, Chou, Sharma, and Lukin teach all of the limitations with the exception that both the front and the end terminals of the telephone network structure operate in IP mode, both the front and the end terminal of the telephone network structure operate in a POTS mode, and the front and the end terminal of the telephone network structure operates in a POTS mode and an IP mode respectively. Chang, from the same field of endeavor, teaches the limitation that the system routes a voice telephone call from a first location to a second location using the IP network, then can route a voice telephone call from a second location to a third location using the PST network (see paragraph 16). Chang's invention also decides the best routes to use (whether IP network or PST network) to avoid congestion, so it may use IP network in either front or back end, and it may use PST network in either front or back end. Thus it would have been obvious to a person having ordinary skill in the art at the time of the invention to combine the adaptive routing of voice calls through both types of networks into the IP telephone system. This adaptive routing can be implemented into the IP telephone system by adding a gateway capable of routing to and from both IP and PST/POTS (digital and analog) networks. The motivation to combine these teachings is that it provides an alternate route for calls that degrade in quality past a predetermined threshold.

11. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over (Chou and Sharma) in view of Lukin.

For claim 16, Chou discloses a multi-point conferencing system comprising at least an internet-protocol phone, wherein at least one of the IP phones has a built-in gateway providing an IP terminal, a plain old telephone service terminal, and a local telephone terminal (see paragraph 17, lines 8-19).

For claim 16, Chou teaches all of the limitations with the exception that a signal entering any one of the three terminals is permitted to convert and transmit to the remaining terminals simultaneously and identical IP terminals or POTS terminals of neighboring IP phones are serially connected together to form a telephone network, and a plurality of conference participants using the telephone network to conduct a conference session. Sharma from the same field of endeavor teaches the function of establishing a data over voice communication session, which allows simultaneous transmission of full-duplex data and voice (see paragraph 109, lines 1-5), as well as digitizing (see paragraph 110) and undigitizing (see paragraph 114) of voice data. Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to allow for conversion and simultaneous transmission of voice and data as taught by Sharma in the IP phone system of Chou. The simultaneous transmission of voice and data can be implemented into the system of Chou by adding hardware and software functionality to the port controller/gateway of the IP phone. The motivation for using the simultaneous conversion and transmission of voice and data as taught by Sharma in the IP phone system of Chou is that a user is able to transmit data to a remote location while concurrently talking to the person receiving the data over the same sets of equipment (see paragraph 89).

Chou and Sharma both teach all of the limitations of claim 16 with the exception that the IP phones are connected together in series by the IP terminal and the POTS terminal to form a

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telephone network and all of the IP phone with the built-in gateway server a function of telephone conference. However, Lukin from the same field of endeavor teaches the provision of connecting different elements, such as a computer and a telephone, in series through the network adapter and telephone adapter to enable converted signals to be transmitted between the ports/terminals (see column 3, line 60 through column 4, line 7). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to connect two network/telephone devices serially to achieve network connectivity between the devices so that they may share the same data channels. The serial connectivity of Lukin can be implemented into the system of Chou and Sharma by connecting two network devices (IP phones) at the network ports (RJ-45) to achieve a serial connection between the two devices. The motivation to combine the serial connection as taught by Lukin into the system of Chou and Sharma is that there would be no need for a separate switching device at the central office when making calls between these devices.

Chou, Sharma, and Lukin teach all of the limitations of claim 16 with the exception that a connection between multiple IP phones in one or more networks can be made to establish a telephone conference. However, this is a well-known feature of telephones in general, and is also well known in IP phones (see reference Fandrianto et al., US 7,006,455). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to include telephone conferencing capabilities to an IP phone network. A conferencing module can be added to each phone to mix incoming voice signals and can multicast a voice signal to each connected phone in the conference. The motivation to combine these features is that multiple

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packet-switched devices can connect together just as multiple regular telephones can connect together in a conference.

For claim 17, Chou, Sharma, and Lukin teach all of the limitations except that at least one IP phone also connects to another telephone. However, connecting another telephone into a multi-point conference system is inherent, because a multi-point conference system is by definition a connection of a plurality of phones, whether IP phones or normal analog telephones.

For claim 18, Chou, Sharma, and Lukin teach all of the limitations except that at least one of the IP phones also connects with a telephone exchange system. However, it is well known in the art to connect a plurality of IP phones to a local exchange system, such as a PBX (see reference Gunn, US 2002/0075847). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to connect one or more IP phones to a PBX or other local telephone exchange system. This can be done by connecting the appropriate port (such as local telephone terminal) to the PBX. The motivation for connecting an IP phone to an exchange system is to gain the features of a PBX, such as voicemail, extension-dialing, call forwarding, etc.

#### ***Allowable Subject Matter***

12. Claims 3-4 and 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chan et al. (US 2001/0046237), Bremer et al. (US 2002/0041662), Gunn et al. (US

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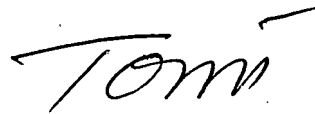
2002/0075847), Miyauchi et al. (2003/0002637), Jaroker (US 2004/0052350), Beyda et al. (US 2005/0053051).

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis Alia whose telephone number is (571) 270-3116. The examiner can normally be reached on Monday through Thursday 8:00AM to 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton can be reached on (571) 272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CAA



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